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(71)Applicant : KIDO JUNJI
AIMESU:KK

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(72)Inventor : KIDO JUNJI
MIZUKAMI TOKIO

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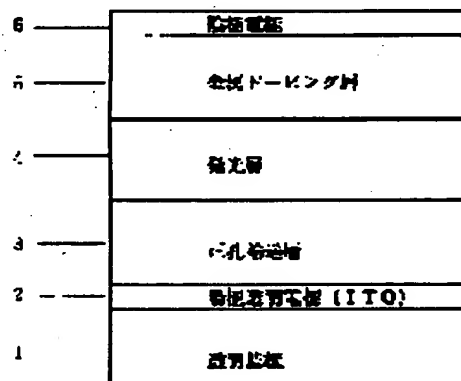
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(54) ORGANIC ELECTROLUMINESCENT ELEMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a low driving voltage and highly efficient high luminance light emission organic EL element by providing a light emission layer made of an organic compound between opposing positive and negative electrodes and further providing an organic compound layer doped with donor dopant metal in the boundary of the negative electrode.

SOLUTION: A positive transparent electrode 2 and a negative electrode 6 which are made of ITO or the like are arranged opposite to each other on a transparent substrate 1 made of glass or the like, a hole transport layer 3 and a light emission layer 4 made of an organic compound are provided therebetween, the metallic doping layer 5 doped with metal functioning as a donor dopant is formed in a boundary with the negative electrode 6, and thereby a highly efficient organic EL element is provided. For the donor dopant, alkaline metal of Li or the like having a work function of 4.2 eV or lower, alkaline earth metal of MG or the like or transition metal such as rare earth metal is preferably used, its concentration is preferably set to 0.1 to 99 wt.%, and a metal doping layer thickness is preferably set to 10 to 3000 Å. Thus, the energy barrier of electron injection from the negative electrode is reduced and low voltage driving is performed.



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